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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,397	01/16/2004	Emanuel Melman	225-003	7479

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EXAMINER	
PIPALA, EDWARD J	
ART UNIT	**PAPER NUMBER**
3663	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/759,397	MELMAN, EMANUEL	
	Examiner	Art Unit	
	Edward Pipala	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7-15 and 18-30* is/are pending in the application.

4a) Of the above claim(s) *5,6,16 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-15 and 18-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office action is in response to Applicant's amendments and remarks filed 10/26/06.

Claims 1-4, 7-15 and 18-30 remain pending, claims 5, 6, 16 and 17 have been withdrawn from consideration.

The rejection of claims 1-4, 7-15, 18-24 and 28-30 under 35 U.S.C. 112 2nd § is hereby withdrawn in view of Applicant's amendments and remarks.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 7-10, 12-15, 18-21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (USPN 5,247,849) in view of Grillo (US Pub 2002/0175894 supplied by Applicant).

Sato discloses a gearshift lever and handle, the construction of which facilitates electrical wiring in the shift lever as well as providing a sophisticated core structure for the shift lever (from the abstract). Further, col. 3, ll. 39-47, col. 5, ll. 32-35 and col. 6, ll. 39-44 disclose that the shift knob is constructed from a core and an outer shell (which

may be considered a housing) of a soft resin such as vinyl chloride, and that the over drive switch in the knob is connected to the vehicle electrical harness (i.e., signal transfer means).

Sato does not teach the use of an analog directional input device in a housing partially within the outer shell of the shift knob, nor a securing means for removably attaching the directional input housing and actuation button housing of claim 13, since in that embodiment they are claimed as being in removable communication with the handle of the gearshift.

Grillo discloses a mouse and button type input device for a computer wherein the mouse is conveniently held in the palm of the user's hand, where the mouse body has buttons for performing normal mouse functions as well as a trackball or other cursor positioning device/switches (from the abstract). Grillo likewise discloses that all mouse functions and so forth can be accomplished without removing the user's hand from the keyboard, and that the mouse body has a strap for securing the body (i.e., mouse device of Grillo) to the user's hand, a means for sensing and processing the trackball, buttons and other actions (electronic circuitry), and a means for transmitting these mouse actions to a computer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have either incorporated the teachings of Grillo (directional input and at least one pressure sensitive actuation button), within the outer covering of the gearshift knob of Sato, or to simply have strapped the device of Grillo or something like it with separate directional input and button housings onto the gearshift knob of Sato so as to allow one with their hand on the shift knob to operate the directional input and

button in the same manner that one would make use of the device of Grillo (... to provide a mouse that can be operated with the user's hands remaining at the home position on the keyboard (section 0016), in order to minimize movement and distraction.

With respect to claim 2, Sato clearly shows an opening for the locking button of the gearshift mechanism.

With respect to claim 3, and a grasped vertical stack orientation with the directional input at the top of the housing for receipt of a user's thumb, it is envisioned that there will be a number of ways that the directional input and button of Grillo can be oriented on or about the gearshift knob of Sato.

With respect to claim 4, and having the directional input device placed within the left side of the housing when the user's right hand is in the a grasped horizontal palm down orientation, once again this is very similar to the original orientation within which the mouse device of Grillo would normally be used, if it were pictured in a right handed manner instead of left-handed, as depicted in the patent. Additionally, and as noted above, the orientation of the directional input and at least one pressure sensitive actuation button seems to be either made part of the housing of Sato or attached thereto by means of the Velcro fastening strap(s) taught in Grillo (sections 0017 through 0021).

With respect to claim 7 which recites a multitude of actuators depressible in an arbitrary 360 degree planar angle with an X-Y directional pad for receipt of a finger of the user, please see section 0005 which teaches the alternative use of a joystick (which is known to have a multitude of depressible actuators for X-Y direction input, where section 0022 further teaches the use of trackball or a 4-way positioning switch placed in the head portion, along with a scroll or click function.

With respect to claim 8 and wherein the signal transfer means is selected from the group of radio, infrared, USB, PS/2, firewire or a serial interface, please see section 0007 of Grillo which teaches a cordless mouse, communication by radio frequency, infrared or optical link.

With respect to claim(s) 9 (and 10), which recites that the at least one pressure sensitive switch is oriented on at least a portion of the left side or front side of the housing ... when the housing is grasped by the right hand in a grasped vertical stack orientation, and claim 10 which refers to the grasped horizontal palm down orientation, please see the Examiner's comments supra with respect to previous claims 3 and 4 and the numerous ways in which the mouse and button device of Grillo on or about the gearshift knob of Sato.

With respect to claim 12, which relates to having a power source selected from either of a battery power source or a computer power source, please note that Grillo

provides for at least a power source, please see section 0035 of Grillo, which teaches use of batteries.

Independent claim 13 was addressed above in conjunction with the rejection of independent claim 1.

With respect to claims 14 (directional input, removably attachable top side, grasped vertical stack orientation) and 15 (directional input, removably attachable left side, grasped horizontal palm down orientation), please see the Examiner's remarks supra with respect to similar claims 3 and 4, wherein it is noted that it would have been obvious to one of ordinary skill in the art at the time the invention was made for one to have positioned the mouse device (directional input and pressure sensitive switch) of Grillo, onto or as part of the gearshift knob of Sato, in a multitude of orientations and positions so long as it is operable when the user's palm is in contact with the shift knob.

With respect to claim 18, wherein the analog directional control device is comprised of a multitude of actuators, please see section 0022 further teaches the use of trackball or a 4-way positioning switch placed in the head portion, along with a scroll or click function.

With respect to claim 19, in which the signal transfer means is selected from the group of radio, infrared, USB, PS/2, firewire or a serial interface, please see section

0007 of Grillo which teaches a cordless mouse, communication by radio frequency, infrared or optical link.

With respect to claims 20 (button housing, grasped vertical stack orientation) and claim 21 (actuation button, grasped horizontal palm down orientation), please see the Examiner's comments with respect to claims 9 ad 10 above.

With respect to claim 24, claiming a battery power source or computer power source, please see section 0035 of Grillo which teaches the use of batteries.

3. Claims 11, 22, 23 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato and Grillo as applied to claims 1-4, 7-10, 12-15, 18-21 and 24 above, and further in view of Lo (USPN 6,072,471 supplied by Applicant).

The combination of Sato and Grillo discussed above, particularly with respect to independent claims 1 and 13, from which claims 11, 22 and 23 depend, provides for a computer operating device for use in an automobile having a hosing or housings containing an analog directional input device, at least one pressure sensitive actuation button, electronic circuitry for translating the inputs of the directional device and button into electrical signals, a signal transfer means in communication with a computer, and a power source. Additionally, sections 0017 and 0018 of Grillo teach that there can be "at least one, and preferably a plurality of buttons on the mouse body, and that these buttons "are placed conveniently to become within easy reach of the user's fingertips".

Presently rejected independent claims 25 and 28 are similar to the above rejected independent claims 25 and 28, respectively, essentially only in that they now include the additional limitation of a lock switch having an enabled and a disabled state as also recited in dependent claims 11, 22 and 23.

Even though Grillo, in the above combination of Sato and Grillo teaches that there may be numerous actuation buttons available for use, neither Sato nor Grillo discloses that any of the buttons in the mouse device of Grillo perform the function of a lock switch (having an enabled and a disabled state).

Lo particularly teaches what is essentially a "lock" switch as part of an ambidextrous upright computer mouse, wherein the switch enables or disables functionality of a mirrored set of the mouse buttons so that only one set of buttons is enabled at any time (abstract).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to have implemented the teaching of Lo, within the combination of Sato and Grillo taught above, through the use one of the plurality of buttons taught by Grillo in the manner taught by Lo, because and for the reason that it may be necessary to limit access or inputs through the gearshift mounted computer operating device during the use of the gearshift for shifting the vehicle or for enabling or disabling certain functions or buttons which may otherwise interfere with the current operation of the vehicle or depending on the orientation of the combined device.

With respect to claims 26 and 29, reciting that the signal transfer means is selected from the group of a radio, infrared, USB, PS/2, firewire or serial interface,

please see the comments with respect to claim 8 above, as well as section 0007 of Grillo.

With respect to claims 27 and 30, which recite a power source selected from either a battery or computer power source, please see the above comments with respect to claim 12 above, as well as section 0035 of Grillo.

Independent claim 28 was addressed above in conjunction with independent claim 25.

Response to Arguments

4. Applicant's arguments filed 10/26/06 have been fully considered but they are not persuasive with respect to the prior art rejection of claims 1-4, 7-15 and 18-30 as being obvious over the prior art of record.

Applicant has amended each of independent claims 1, 13, 25 and 28 to include claim language such as "wherein said at least one pressure sensitive actuation button is on the top portion of said gearshift to allow the user's thumb to mouse", to which the following remarks and comments by the Examiner addressed.

Figure 1 of Grillo shows the hand supported mouse in the palm of a user in an essentially upright grasped vertical stack orientation with mouse portion 20 being relatively closely placed to the user's thumb 104, by which the mousing function can be readily performed when grasping a vertically oriented gearshift while using the device of combination of Sato and Grillo.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Pipala, whose PTO office telephone number is 571-272-1360. The examiner can normally be reached on Monday through Friday from 7:30 – 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ejp

JACK KEITH
SUPERVISORY PATENT EXAMINER